## Amendments to the Claims:

This listing will replace all prior versions, and listings, of the claims in the application. Please cancel Claims 3 and 16, without prejudice or disclaimer.

## Listing of Claims:

1. (currently amended) A controller comprising:

a rotatable platter journaled for rotation, said rotatable platter having at least one degree of freedom of movement in addition to rotation said rotatable platter including a circumferential skirt;

an optical system comprising a lens, an image sensor, a light source and a signal processor

responsive to said rotatable platter;

said optical system being positioned to optically acquire sequential images from said circumferential skirt and determine the direction and magnitude of movement; and said optical system including an output responsive to said rotatable platter.

2. (currently amended) The controller of Claim 1 wherein said rotatable platter circumferential skirt includes a textured pattern whereby said optical system acquires sequential surface images of said textured pattern.

Claim 3 – (canceled)

- 4. (currently amended) The controller of Claim [[2]] 1 wherein said optical system is responsive to rotational velocity of said rotatable platter.
- 5. (currently amended) The controller of Claim [[2]] 1 wherein said optical system is responsive to rotational position of said rotatable platter.
- 6. (currently amended) The controller of Claim [[1]] 17 wherein said at least one degree of freedom of movement comprises one and only one degree of freedom of movement.
- 7. (original) The controller of Claim 6 wherein said one degree of freedom comprises tilting of said rotatable platter.
- 8. (original) The controller of Claim 7 wherein said optical system is responsive to tilting movement of said rotatable platter.
- 9. (original) The controller of Claim 7 wherein said optical system is responsive to tilting velocity of said rotatable platter.
- 10. (original) The controller of Claim 7 wherein said optical system is responsive to tilting position of said rotatable platter.
- 11. (currently amended) The controller of Claim [[1]] 17 wherein said at least one degree of freedom of movement comprises two degrees of freedom of movement.

- 12. (original) The controller of Claim 11 wherein said two degrees of freedom comprise tilting of said rotatable platter in directions orthogonal to each other.
- 13. (original) The controller of Claim 12 wherein said optical system is responsive to tilting movement of said rotatable platter.
- 14. (original) The controller of Claim 12 wherein said optical system is responsive to tilting velocity of said rotatable platter.
- 15. (original) The controller of Claim 12 wherein said optical system is responsive to tilting position of said rotatable platter.

Claim 16 – (canceled)

- 17. (new) The controller of Claim 1 wherein said rotatable platter has at least one degree of freedom of movement in addition to rotation, an extent of movement of said at least one degree of freedom of movement being determined by said optical system optically acquiring sequential images from said circumferential skirt.
- 18. (new) The controller of Claim 1 wherein said light source is a light emitting diode (LED).

19. (new) The controller of Claim 1 wherein said optical system is an optical navigation system.